

**Notice of Allowability**

Application No.

09/938,630

Examiner

Nguyen Ngo

Applicant(s)

KIM ET AL.

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 7/12/2005.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **EXAMINER'S AMENDMENT**

### ***Response to Amendment***

1. This communication is in response to the amendment of 7/12/2005. All changed made to the Abstract, Drawings, and claims have been entered. Accordingly, Claims 1-11 are currently pending in the application.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Vishal Khatri on 9/29/2005.

The application has been amended as follows:

3. -Claim 11, line 3, the phrase "which each address is to be read out for multicasting is stored the address of in a first predetermined memory" has been changed to -- which each address is to be read out for multicasting is stored in the addresses of a first predetermined memory --.

### ***Allowable Subject Matter***

4. Claims 1-11 allowed.

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The following is an examiner's statement for reason for allowance:

5. Claims 1 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose **selecting one bit from an output port bitmap at a tome and outputting output port information of one bit and class information as a data stream together with an enable signal, wherein when ready data is presented in the input subqueue, the input sunqueue reading means also reads out the input subqueue prior to the completion of all data processing**. It is noted that the closest prior art, Colmant et al. (US Patent 6144662) shows a switching device, which transports data packets from input ports to selected output ports. However, Colmart et al. fails to disclose or render obvious the above underlined limitations as claimed.

6. Claims 5 and 10 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose **selecting one bit for the data read out of the input subqueue at a time to create a bitmap stream selected only one bit, when the pointer is forwarded from the input subqueue to the corresponding output subqueue, wherein in case ready data is presented in the input subqueue, the data stored in the input subqueue is read out before being processed all data, thereby preventing a waiting time between data of the input subqueue from being occurred**. It is noted that the closest prior art, Colmant et al. (US Patent 6144662) shows a switching device, which transports

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data packets from input ports to selected output ports. However, Colmart et al. fails to disclose or render obvious the above underlined limitations as claimed.

7. Claims 6 and 11 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose slowing a read value to be increased at each instant of the reading of the corresponding address of the shared memory, wherein the increased value is compared with the final number, if the increased value is less than the final number, the increased value is increased by one; and if the increased value is equal to the final number, the increased value is set to be zero, thereby allowing the address of the shared memory to be returned to an unused address list. It is noted that the closest prior art, Schnell (US Patent 5923654) shows a network switch for transferring packets of information including a plurality of shared packet buffers for a plurality of network ports and further shows pointers that are cleared to mark a circular buffer as empty. However, Schnell fails to disclose or render obvious the above underlined limitations as claimed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

N.N.  
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**Nguyen Ngo**

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